

**THE FORT COLLINS WIND POWER PILOT
PROGRAM: WHO SUBSCRIBED AND WHY**

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EXECUTIVE SUMMARY

In May of 1998, the City of Fort Collins electric utility implemented its Wind Power Pilot Program after nearly two years of effort. By paying a premium of 2¢/kWh, utility customers could ensure that the equivalent of the electricity they used was produced by wind turbines. The utility initiated the program as part of its effort to diversify its product offerings and be more competitive in a deregulated electric utility industry. As a result of Fort Collins' marketing efforts, about 700 customers—enough customers to support two wind turbines—subscribed to the program. The 700 customers represent just under 2% of the total 1997 Fort Collins residential customer base. An additional 1,500 customers, representing about 4% of the customer base, asked for information about the program, but did not subscribe (“interested nonsubscribers”).

Last Spring, Fort Collins received a grant from the Governor's Office of Energy Conservation in Colorado to conduct this study. Its purpose was to characterize who subscribed to the program and who did not, to find out why people did or did not subscribe, and to understand what future subscription rates for the program might be. We have answered these questions based on an analysis of telephone interviews conducted with simple random samples from three groups: subscribers, interested nonsubscribers, and other customers. The other customer sample was drawn from among customers who were not likely to be Colorado State University students or who lived in apartments. Students were excluded from the sample because the program was targeted to households willing to commit to continuing in the program for a three-year period; renters were excluded because many do not pay their own electric bills. The sample sizes for subscribers, interested nonsubscribers, and other customers were 248, 307, and 381 customers, respectively. Results were analyzed at a 95% confidence level with a ±5% level of precision.

Characteristics of the Three Groups

Slightly more than 60% of the sample of other customers reported that they were aware of the Wind Power Pilot Program. Based on this, the number of subscribers, and the number of interested nonsubscribers, we conclude that Fort Collins wind power marketing efforts reached and made aware about 70% of the eligible customers. An April 1998 study for Fort Collins found that 55% of customers were aware of the program. Clearly, the marketing efforts have succeeded in continuing to raise the level of awareness.

The survey results show that having a higher income is a key driver of subscription in the Wind Power Pilot Program. Among the three groups, subscribers tend to have higher incomes and levels of education than the other two groups.

Customer decision-making also was influenced by social and cultural environments. There was a slight tendency for subscribers to this program to be less involved in community activities than the other two groups. However, half of the subscribers in the program are members of an environmental organization—a membership rate that is three times greater than the rate for other customers.

Subscribers were much more knowledgeable than interested non-subscribers and other customers about wind power and green power. Subscribers were more likely to say that they had studied wind power. People with greater knowledge are more likely to understand and accept both the technology and the program. It is quite likely that the greater knowledge stems in part from personal contacts and involvement with environmental groups.

We expected to find that subscribers are “innovators” and “early adopters”; that is, subscribers are people who are among that portion of the population that is typically the first to try new products and ideas. Although we found a slight but not statistically significant tendency for subscribers to be innovators and early adopters compared to the other two groups, subscribers were more likely to be “late majority” adopters (those who take a wait-and-see attitude). This should not be surprising because subscribers are clearly committed to the environment, a position that may have been held for a long time, so wind power is not viewed as either an innovative technology or program. The Wind Power Pilot Program may have provided an opportunity for subscribers to express their long-standing environmental commitments.

Attitudes About the Program

Subscribers told us that their main reasons for subscribing were environmental. Interested nonsubscribers and other customers aware of the program also perceived the benefits of such a program to be environmental in nature, but not to the same extent.

All three groups cited the utility as their main source of information about the program, although other customers were more likely to have received information through the media. Subscribers were significantly more likely to have received information through personal contacts.

Cost and equity issues were cited as negative aspects of the program and reasons why people did not subscribe. Many customers said they should not have to pay more for energy generated from wind power. Visual and noise pollution and raptor issues were cited by a small percentage—less than 10%.

Subscribers were more satisfied with the program than interested non-subscribers, with an average rating of 7.9 on a 10-point scale, compared with interested nonsubscribers, whose average rating was 6.6. When we analyzed the ratings given by both groups, we found that overall satisfaction was driven by the content of the information received about the program and the subscription

process. The amount of information and the method of receiving information were not related to overall satisfaction. Those who were more satisfied with the content of information and the subscription process gave higher ratings to overall satisfaction. When we included the energy charge in our analysis of the overall satisfaction of subscribers, it too was related to overall satisfaction, although satisfaction with the energy charge was only about a third as important as the content of the information that was received.

Another way of measuring satisfaction is to ask whether people will continue in the program and whether they will recommend the program to friends. Nearly 80% of the subscribers said that they would continue in the program and nearly 90% said they would recommend the program to others. Finally, almost half of the interested nonsubscribers and 22% of the other customers said they expected to subscribe in the future. These figures translate into a potential subscriber base of 6,000 to 7,000 customers without any changes in marketing efforts. When those responding "maybe" are added, the potential is about 17,000 customers, although marketing efforts would need to be modified.

Loyalty and Attitudes Toward the Utility

We analyzed two sets of factors relating to the utility's products and services. The first set of factors examined how the customers perceived the role of the utility with respect to the environment, the cost of power generated, and how costs for the environmentally beneficent power sources (e.g., wind) should be distributed. We found two types of customers, whom we call the *cost-conscious individualists* and the *egalitarian greens*. The cost-conscious individualists believe that costs should be kept low, the utility should place less emphasis on the environment, and people who are interested in environmental programs should pay for them. Egalitarian greens believe that the environment should take precedence over cost and that all customers should pay for the costs of generating energy from green sources. The subscribers were clearly of the latter persuasion, while interested nonsubscribers and other customers tended to be the former.

We also asked respondents to rate the value of utility services, such as high reliability, energy efficiency programs, green generation, having a local office, and having a quick response time. We found three patterns. There are people who want all services, including environmentally friendly sources of power (*full-service greens*), people who believe utilities should pay attention to keeping the lights on at the lowest possible cost (*traditionalists*), and *no-frill greens*, who want energy from green sources, quick response to outages but not necessarily high reliability, and energy efficiency programs. Among the subscribers, the no-frills greens predominate, while among the interested nonsubscribers and the other customers, the full-service greens predominate. It is clear that Fort Collins utility customers expect their utility to provide services above and beyond those that might be provided by a traditional utility.

Fort Collins customers expressed a great deal of loyalty to the utility, which, for subscribers, appeared to be an underlying condition leading to their decisions to subscribe. About half of other customers said they would not switch utilities if they were offered savings of a few dollars a month to switch. Only 16% would definitely switch for such an incentive and about a quarter would think about it. Almost 70% of the subscribers would not switch, while just 3% would; about 17% might consider it. Lower utility bills were clearly less of an issue for the subscribers than the other two groups. When we asked if customers had switched telephone services, nearly 60% of all customers said that they had not. Only 10-15% had switched two or more times.

Willingness to Pay

Finally, we come to the issue of willingness to pay for green energy. One of the clearest findings in the study is that subscribers are willing to pay and they have the means to pay, but they would prefer that everyone share in the cost of clean energy generation.

Our analyses suggest that subscribers would be willing to pay as much as 2.5¢/kWh for generation from green sources before they would begin to drop out of the program in large numbers. A rate of 2.5¢ seems to be the optimal rate for maximizing both revenue and the number of subscribers.

There are many hints in the data that cost was an issue for both the interested nonsubscribers and the other customers. When we asked if customers would subscribe at a \$5.00 per month flat rate, almost 60% of the interested nonsubscribers and 35% of other customers said they would. When the flat rate was raised to \$10.00, half or more dropped out, indicating that \$5.00 is the optimal rate for attracting the most customers and maximizing revenue. We found similar results when we analyzed interest in a block rate structure. Subscription is highest at the lowest rates and steadily declines.

Recommendations

This is a program that is well received by the customers and should be continued. Subscribers are very interested in receiving feedback from the utility about the program. Their subscription is important to them and they want to know that they are doing something worthwhile. The utility should continue to provide information to all customers about the Wind Power Pilot Program and green power in general.

The environment is the key theme in this program—not just the environment in general, but the environment in the sense of clean power generation. This is a theme that must be stressed in recruitment and retention efforts. Sixty percent or more of the customers believe that the utility should offer green services.